

### **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed April 16, 2004. Upon entry of the amendments in this response, claims 2, 4 - 14, 16, and 20 - 32 remain pending. In particular, Applicants have amended claims 2, 4, 9, 10, 12, 16, 20 - 21, 26, 28 and 29, and have canceled claims 1, 3, 15, 17 - 19 and 33 - 38 without prejudice, waiver, or disclaimer. Applicants have canceled claims 1 - 3, 15, 17 - 19 and 33 - 38 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **Allowable Subject Matter**

Applicants acknowledge that claims 22 - 25 are allowed. The Applicants agree with the Examiner's conclusions regarding patentability, without necessarily agreeing with or acquiescing in the Examiner's reasoning. In particular, the Applicants believe that claims 22 - 25 are allowable because the prior art fails to teach, anticipate, or render obvious the invention as claimed, independent of how the invention is paraphrased. Also, the Office Action indicates that claims 4 - 8 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. As set forth above, Applicants have rewritten claim 4 in independent form and respectfully assert that claim 4 and its dependent claims are in condition for allowance.

## Rejections Under 35 U.S.C. §102

The Office Action indicates that claims 1 - 3, 15, 26, 28 - 29, 33 - 34 and 37 - 38 stand rejected under 35 U.S.C. §102(b) as being fully anticipated by *Samworth*. With respect to claims 1, 3, 15, 33 - 34 and 37 - 38, Applicants have canceled these claims without prejudice, waiver or disclaimer and respectfully assert, therefore, that the rejection as to these claims has been rendered moot. With respect to claims 2, 26, and 28 - 29, Applicants respectfully traverse the rejection.

With respect to claim 2, Applicants have amended this claim such that it incorporates all the features/limitations of claim 4, the allowability of which was described above. Therefore, Applicants respectfully assert that the rejection of this claim is improper and should be removed.

With respect to claim 26, that claim recites:

26. A printing system including a printer and a computer, the printing system printing a dot density and dot size modulated image, the method performed by the printing system comprising:  
*performing dispersed dot halftoning for a pixel location based on an input pixel value for said pixel location such that the dot density of the image is modulated; and*  
*performing dot size modulation for said pixel location based on dot size and dot position of halftoned dots determined by said dispersed dot halftoning.*  
(Emphasis Added).

Applicants respectfully asserts that *Samworth* does not teach or otherwise disclose at least the features/limitations emphasized above in claim 26. Therefore, Applicants respectfully assert that claim 26 is in condition for allowance.

With respect to claim 28, that claim recites:

28. An image forming system comprising:  
a computer;  
a printing device coupled to said computer;  
*a computer program executed by said computer, wherein said computer program comprises computer instructions for:*

*performing dispersed dot halftoning for a pixel location based on an input pixel value for said pixel location such that the dot density of the image is modulated; and*

*performing dot size modulation for said pixel location based on dot size and dot position of halftoned dots determined by said dispersed dot halftoning.*

(Emphasis Added).

Applicants respectfully asserts that *Samworth* does not teach or otherwise disclose at least the features/limitations emphasized above in claim 28. Therefore, Applicants respectfully assert that claim 28 is in condition for allowance.

Additionally, claim 29 is a dependent claim that includes all of the features/limitations of claim 28, therefore, Applicants respectfully assert that this claim also is in condition for allowance. Claim 29 also recites other features/limitations that may serve as an independent basis for patentability.

The Office Action also indicates that claims 1, 9 - 11, 15 - 17, 21, 26, 28 - 30 and 33 - 38 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Morimatsu*. With respect to claims 1, 15, 17, and 33 - 38, Applicants have canceled these claims without prejudice, waiver or disclaimer and respectfully assert that the rejection as to these claims has been rendered moot. With respect to claims 9 - 11, 16, 21, 26, 28 and 30, Applicant respectfully traverse the rejection.

Specifically, with respect to claims 9 - 11, 16 and 21, Applicants respectfully assert that these claims are dependent claims that incorporate all the features/limitations of claim 4, the allowability of which was described above. Therefore, Applicants respectfully assert that the rejection of these claims is improper.

With respect to claim 26, that claims recites:

26. A printing system including a printer and a computer, the printing system printing a dot density and dot size modulated image, the method performed by the printing system comprising:

*performing dispersed dot halftoning for a pixel location based on an input pixel value for said pixel location such that the dot density of the image is modulated; and*

*performing dot size modulation for said pixel location based on dot size and dot position of halftoned dots determined by said dispersed dot halftoning.*

(Emphasis Added).

Applicants respectfully assert that *Morimatsu* does not teach or otherwise disclose at least the features/limitations emphasized above in claim 26. Therefore, Applicants respectfully assert that claim 26 is in condition for allowance.

With respect to claims 28:

28. An image forming system comprising:

a computer;

a printing device coupled to said computer;

*a computer program executed by said computer, wherein said computer program comprises computer instructions for:*

*performing dispersed dot halftoning for a pixel location based on an input pixel value for said pixel location such that the dot density of the image is modulated; and*

*performing dot size modulation for said pixel location based on dot size and dot position of halftoned dots determined by said dispersed dot halftoning.*

(Emphasis Added).

Applicants respectfully asserts that *Morimatsu* does not teach or otherwise disclose at least the features/limitations emphasized above in claim 28. Therefore, Applicants respectfully assert that claim 28 is in condition for allowance.

Additionally, claim 30 is a dependent claim that includes all of the features/limitations of claim 28, therefore, Applicants respectfully asserts that this claim also is in condition for allowance. Claim 30 also recites other features/limitations that may serve as an independent basis for patentability.

### **Rejections Under 35 U.S.C. §103**

The Office Action indicates that claims 18, 20 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Samworth* or *Morimatsu*. As set forth above, Applicants have canceled claim 18 without waiver, disclaimer or prejudice and respectfully assert that the rejection as to this claim has been rendered moot. With respect to claim 20, Applicants respectfully assert that this claim is a dependent claim that incorporates all the features/limitations of claim 4, the allowability of which was described above, therefore, Applicants respectfully assert that the rejection of this claim is improper. With respect to claim 31, Applicants respectfully traverse the rejection.

Specifically, Applicants respectfully assert that claim 31 is a dependent claim that incorporates all the features/limitations of claim 28, the allowability of which is described above. In particular, with respect to the rejection of claim 28 under 35 U.S.C. 102, under *Samworth* and *Morimatsu*, Applicants respectfully assert that the Office Action has failed to provide the requisite teaching or suggestion for rendering obvious the features/limitations emphasized above in claim 28, Applicants respectfully assert, therefore, that the rejection of dependent claim 31 under 35 U.S.C. 103 is legally deficient and respectfully assert that claim 31 is in condition for allowance.

The Office Action also indicates that claims 12 - 14, 19, 27 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Samworth* or *Morimatsu* in view of *De Maio*. With respect to claim 19, Applicants have canceled this claim without waiver, disclaimer or prejudice and respectfully assert that the rejection as to this claim has been rendered moot. With respect to claims 12 – 14, Applicants respectfully assert that these claims are dependent claims and incorporate all the features/limitations of claim 4, the allowability of which was described above. Therefore, Applicants respectfully assert that

claims 12 – 14 are in condition for allowance. With respect to claims 27 and 32, Applicants respectfully traverse the rejection.

Specifically, claim 27 is a dependent claim that incorporates all the features/limitations of claim 26 and, as set forth above in Applicants' response to the rejections of claim 26 under 35 U.S.C. 102, neither *Samworth* nor *Morimatsu* teaches or reasonably suggests all the features/limitations recited in claim 26. Applicants also respectfully assert that *De Maio* does not teach or reasonably suggest at least these features/limitations that are shown as lacking in *Samworth* and *Morimatsu*. Therefore, Applicants respectfully assert that the Office Action fails to present a prima facie case of obviousness and that claim 27 is in condition for allowance.

Claim 32 is a dependent claim that incorporates all the features/limitations of claim 28 and as set forth above in Applicants' response to the rejections of claim 28 under 35 U.S.C. 102, neither *Samworth* nor *Morimatsu* teaches or reasonably suggests all the features/limitations recited in claim 26. Applicants also respectfully assert that *De Maio* does not teach or reasonably suggest at least these features/limitations that are shown as lacking in *Samworth* and *Morimatsu*. Therefore, Applicants respectfully assert that the Office Action fails to present a prima facie case of obviousness and that claim 32 is in condition for allowance.

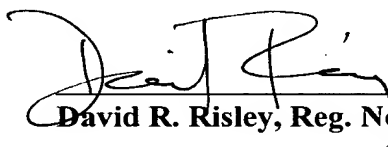
#### **Cited Art Made of Record**

The cited art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

## CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 2, 4 - 14, 16, and 20 - 32 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

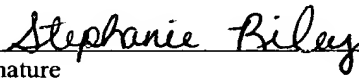
Respectfully submitted,

  
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on 7/16/04.

  
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